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W. W. ASHE NURSERY

Black Creek District

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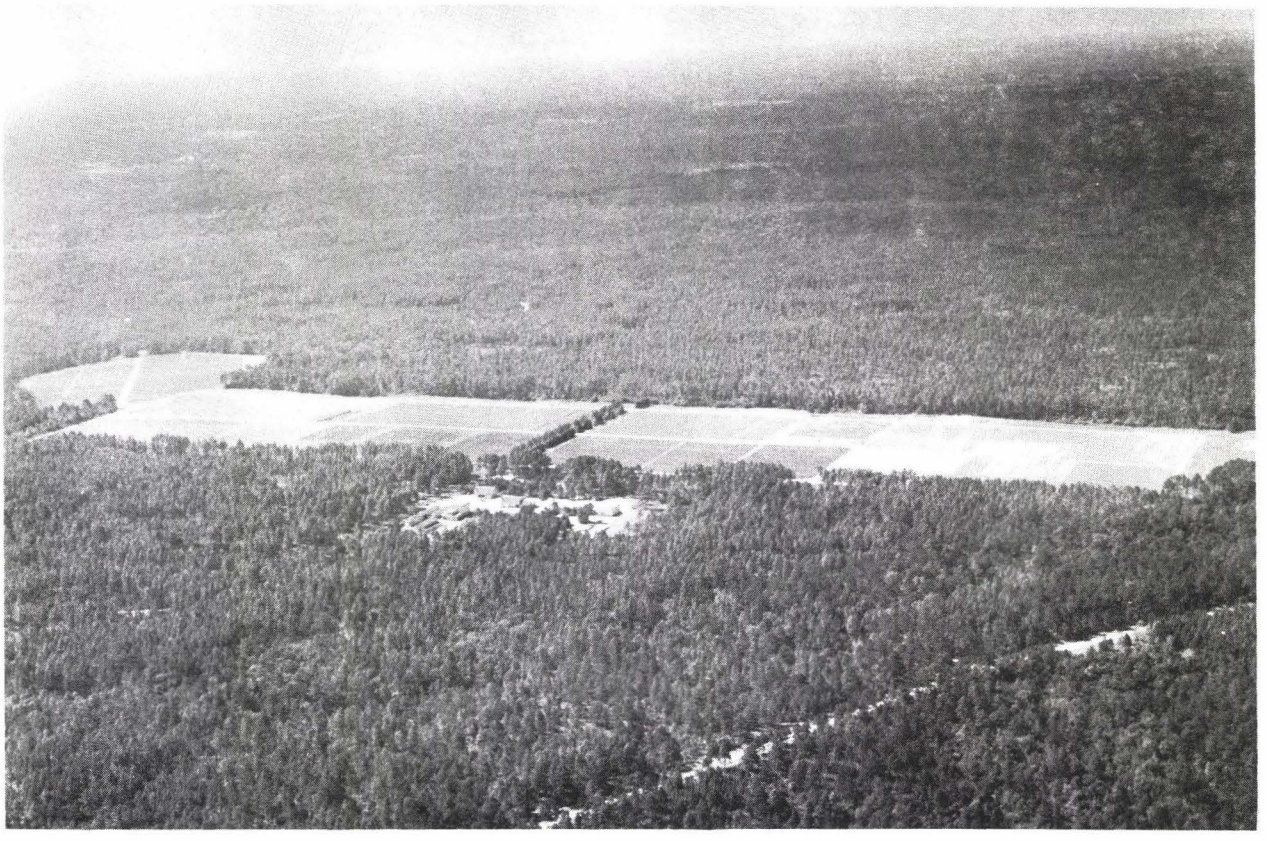

W. W. ASHE NURSERY

The W. W. Ashe Nursery was established in 1936. The Nursery has 82 plantable acres with a total capacity for 50 million seedlings. The present production is 25 million seedlings. Species grown at the Nursery are longleaf (Pinus palustris), loblolly (Pinus taeda), shortleaf (Pinus echinata), and slash pine (Pinus elliotii).

SEEDBED MANAGEMENT

Rotation--one year seedlings production and one year cover crop or 2 years seedlings production and one year cover crop.

Cover crop--sorghum is a heavy producer of green material which is essential to build up the organic content of the soil. Before plowing under the cover crop, approximately 34 tons of pine bark and shavings per acre is added.

Fertilizer is also applied just prior to plowing. The rate of application depends on the soil analysis--generally about 500 pounds of 5-10-30 per acre.

SEEDBED PREPARATION

Twenty-five to 30 pounds of vorlex fumigant are injected into the soil, immediately followed by a water seal. This is done about 3 weeks prior to preparing the seedbeds and sowing. The soil is well aerated prior to sowing to get rid of the vorlex vapors.

The beds are prepared and shaped. One quart of Treflan per acre is added to the soil as a pre-emergence herbicide.

SOWING OF SEEDBEDS

Longleaf is generally sown in early winter. All other species are sown in late March or early April.

The seed is broadcast in the case of longleaf pine and drilled with other species. The beds are immediately covered with a mulch. Presently ground-up pine cones are used as a mulch. Pine straw has been used in the past.

The beds are kept moist during the germinating period. Germination usually starts within 5 to 10 days after sowing. Germination is completed in 30 days.

DISEASE CONTROL

Fusiform rust (Cronartium fusiforme) control: Ferbam is applied at the rate of 2 pounds per acre two to three times a week to slash and loblolly pine seedbeds depending on weather conditions. Application starts immediately after sowing and continues until mid-July.

Ferbam is also used to control brownspot on longleaf pine. Morsedren, Captan, and Terechlor has been used to control damping off.

SEEDBED MANAGEMENT

Fertilizer (ammonium nitrate or on occasion di-ammonium phosphate) is applied as top dressing as needed. We generally base fertilization requirements on the color of the seedlings.

WEED CONTROL

Mineral spirits is used to control weeds. Twelve gallons per acre are applied early in the season. The rate increases as the season progresses--up to 25 gallons per acre.

Hand weeding is also done as necessary during the growing season.

SEED EXTRACTION

The extractory was constructed in 1959. The kiln has 10 bins with an approximate capacity of 200 bushels of cones per bin, depending on the species. The cones are kept in the kiln for 16 to 24 hours at temperatures of 110 degrees Fahrenheit to 120 degrees Fahrenheit.

Longleaf, slash	110 degrees F
Loblolly, shortleaf	120 degrees F

The cones then go to the tumblers where the seeds are separated from the cones and then go through a scalper cleaner where the small branches, pine straw, and foreign materials are removed. Following dewinging the seeds pass through a cleaner which takes out the wings and small trash. The seeds finally pass over the gravity separator which removes the empty seed from the full seed.

Finally, the seed is dried to 10 percent moisture content or less, placed in plastic bags, and sealed in 50-gallon steel drums. A sample of seed is taken prior to sealing and sent to the Eastern Tree Seed Laboratory at Macon, Georgia, to determine germination rate, number of seeds per pound, purity, and moisture content. The sealed drums are placed in cold storage at 20 degrees F.

PACKING SHED

Lifting of seedlings begins about the first of December and continues through mid-March. The seedlings are brought from the field, graded, and counted. All unplantable and diseased seedlings are discarded. Finally, the seedlings are baled--500-1000 per bale, depending on the species--and stored for at least 24 hours at 38 degree F before they are shipped.